

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	
Martha Gardner et. al.	§	Group Art Unit: 2166
	§	
Serial No.: 10/643,191	§	Confirmation No.: 3700
	§	
Filed: August 18, 2003	§	Examiner: Ahluwalia, Navneet K
	§	
For: METHOD AND SYSTEM FOR	§	Atty. Docket: 134734-1/SWA
ASSESSING AND OPTIMIZING	§	GERD: 0701
CRUDE SELECTION	§	

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<u>March 25, 2008</u> Date	<u>/Tait R. Swanson/</u> Tait R. Swanson Reg. No. 48,226

**REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41**

Sir:

The Appellants hereby submit this Reply Brief in response to the Examiner's Answer mailed on January 25, 2008, in furtherance to the Appeal Brief electronically filed on November 13, 2007, and in furtherance to the Notice of Appeal and Pre-Appeal Brief Request for Review electronically filed on September 17, 2007.

As discussed in the previously filed Appeal Brief and Pre-Appeal Brief Request for Review, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under Section 103. In the Examiner's Answer, the Examiner included a Response to Argument section on pages 20-23. Beginning on page 2 of this Reply Brief, the Appellants address some of the Examiner's rebuttals made in the Response to Argument section and/or clarify some of the Appellants' previous arguments made in the Appeal Brief and Pre-Appeal Brief Request for Review. Again, the Appellants respectfully request full and favorable consideration by the Board, as the Appellants assert that all pending claims are currently in condition for allowance.

***No Objective Evidence to Combine References***

On pages 12, 13, 21, 22, and 24 of the Appeal Brief, the Appellants stressed the lack of any objective evidence to combine the cited references, i.e., Phillips (US Patent No. 6,792,399 B1, hereinafter “Phillips”) in view Henley (Patent No. EP1102187 A2, hereinafter “Henly”). However, in the Examiner’s Answer, the Examiner failed to address this deficiency in the rejection. Again, the Appellants stress that a *prima facie* case of obviousness requires more than unsupported picking and choosing of elements from various prior art references.

In addressing obviousness determinations under 35 U.S.C. § 103, the Supreme Court in *KSR International Co. v. Teleflex Inc.*, No. 04-1350 (April 30, 2007), reaffirmed many of its precedents relating to obviousness including its holding in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). In *KSR*, the Court also reaffirmed that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *Id.* at 14. In this regard, the *KSR* court stated that “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does ... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *Id.* at 14-15. In *KSR*, the court noted that the demonstration of a teaching, suggestion, or motivation to combine provides a “helpful insight” in determining whether claimed subject matter is obvious. *KSR, slip op.* at 14. However, the court rejected a *rigid* application of the “TSM” test. *Id.* at 11. Furthermore, the *KSR* court did not diminish the requirement for objective evidence of obviousness. *Id.* at 14 (“To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”); see also, *In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed.

Cir. 2002) (holding that the factual inquiry whether to combine references must be thorough and searching, and that it must be based on *objective evidence of record*).

As summarized above, the *KSR* court did not diminish the requirement for objective evidence of obviousness, but rather required some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In the Examiner's Answer, the Examiner reiterated:

It would have been obvious to one of ordinary skill in the art of data processing at the time of the present invention to combine the teachings of cited references because Henly's prediction of properties of and optimization of plant's output of products in combination with the prediction models and risk analyzer of Philips would result in accurate prediction of the crude oil blend to be used (paragraph 0004 and 0012, Henly). Examiner's Answer, page 5.

In support of this statement, the Examiner cited paragraphs [0004] and [0012] of Henly, which are reproduced below:

[0004] The present invention also relates to the accurate prediction of final properties of a blended fuel utilizing non-linear optimization and property prediction.

[0012] In another embodiment, the present invention discloses a method of accurately predicting a characteristic of a product to be prepared by a processing plant, by providing an incoming material having at least one measured property, selecting at least one product having a desired characteristic to be prepared from said incoming material by said processing plant, selecting a process to be used by the processing plant to produce the product with its characteristic, and calculating a predicted value of the characteristic of the product utilizing a predictive equation. The predictive equation is a validated non-linear equation generated by regressive analysis of an accumulation of data relating the measured property of the incoming material, the process, and the characteristic of the product. Henly, paragraphs [0004] and [0012] (emphasis added).

As indicated above, these paragraphs merely show that Henly relates to prediction of final properties of a product produced by a processing plant. *See id.* However, the Examiner did not provide any sort of articulated reasoning with some rational underpinning to support the proposed combination of Henly with Phillips and, thus, the legal conclusion of obviousness. One of ordinary skill in the art would not find it obvious to combine Henly with Phillips

based on these paragraphs of Henly, much less any other portion of Henly, Phillips, or even common sense. The Appellants stress that one of ordinary skill in the art would not find it obvious to combine a product output prediction of a fuel processing plant of Henly with an economic forecasting model of Phillips simply because these two references pertain generally to predictions. Phillips forecasts the values of economic variables, such as the price of a share of stock or a commodity. *See* Phillips, col. 1, lines 8-10. In sharp contrast, Henly predicts final properties of a blended fuel. *See* Henly, paragraph [0004]. These are completely different prediction techniques in completely different fields of art. Again, the Appellants emphasize the lack of any objective evidence to combine these two references in the manner suggested by the Examiner.

Accordingly, in view of the missing objective evidence, the Appellants respectfully stress that the Examiner has failed to present a *prima facie* case of obviousness of the present claims. Therefore, the Appellants respectfully request withdrawal of the foregoing combination and allowance of all pending claims.

### ***Hindsight Reconstruction***

In addition, the Appellants submit that the Examiner's rejection is based on hindsight reconstruction in view of Appellants' disclosure. As a result, the Examiner has not presented a *prima facie* case of obviousness of the pending claims.

As set forth on page 10 of the Appeal Brief, when prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). The Federal Circuit has warned that the Examiner must not, "fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." *In re Dembiczak*, F.3d 994, 999, 50 U.S.P.Q.2d

52 (Fed. Cir. 1999) (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)).

In the Examiner's rejection, the Examiner appears to pick and choose elements from Henly and Phillips using the Appellants' application as a guide. It appears that the Examiner is using Appellants' own disclosure to provide the rationale to combine the references. The Examiner has not cited any objective evidence that would lead one of ordinary skill in the art to combine these references. Again, the Examiner's reason to combine the references is conclusory at best. The Examiner merely concludes that a combination of the references would "result in accurate prediction of the crude oil blend to be used." Examiner's Answer, page 5. Even if this statement was hypothetically accurate, the Examiner did not provide any reasons for the combination. Just because references can be combined, does not mean that one of ordinary skill in the art would find it obvious to combine the references.

Accordingly, for this additional reason, the Appellants respectfully stress that the Examiner has failed to present a *prima facie* case of obviousness of the present claims. Therefore, the Appellants respectfully request withdrawal of the foregoing combination and allowance of all pending claims.

***Conclusion***

The Appellants respectfully submit that all pending claims are in condition for allowance. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: March 25, 2008

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